a service discovery mechanism used to propagate services information regarding services interconnecting elements in said first subset with elements in said second subset.

3. (currently amended) A network for providing multi-service generalized Layer-2 VPN services as claimed in claim 1, said signalling mechanism having:

a manager mechanism having a first portion used to effect connection admission control and a second portion used to select encapsulation in response to a connection request; and

a multi-service tunnel selector mechanism used to create connectivity across the provider network.

4. (previously amended) A network for providing multi-service generalized Layer-2 VPN services as claimed in claim 3, said network further comprising:

a generalized single-sided signalling mechanism used to initiate said connection request triggered by an element of said first subset.

5. (currently amended) A method of organizing a network having a set of elements interconnected by services, wherein at least one first subset of said elements defines a private network and at least one second subset of elements different from said first subset defines a provider network and wherein at least two subgroups of said first subset of elements may be connected via said provider network, said method comprising:

defining element membership in said first subset of elements via a provisioning mechanism;

creating, via a multi-service tunnel selector mechanism, generalized pseudo-wire connectivity between elements within said first subset of elements, said connectivity created across said second subset of elements, and said connectivity at a layer selected from one or both of the group consisting of Layer-2 and Layer-1.

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